Table 4-2 Annual rates of growth in U.S. R&D expenditures, total and by performing sectors: 1993–2013

(Percent)

	Longer-term trends			Most recent 5 years				
Expenditures and gross domestic product	1993–2003	2003–08	2008–13	2008–09	2009–10	2010–11	2011–12	2012–13
				Current $				
Total R&D, all performers	5.9	6.8	2.3	-0.4	0.8	4.8	1.8	4.8
Business	5.7	7.7	2.1	-2.9	-1.2	5.4	2.8	6.7
Federal government	4.3	4.2	1.8	3.8	5.5	5.4	-2.6	-2.8
Federal intramural[a]	4.2	3.6	2.1	2.4	4.6	9.3	-2.7	-2.9
FFRDCs	4.4	5.2	1.3	6.3	7.0	-1.5	-2.4	-2.7
Nonfederal government	NA	NA	6.4	NA	20.9	0.6	-5.1	-0.1
Universities and colleges	7.4	5.1	3.7	5.7	6.0	3.4	1.3	2.2
Other nonprofit organizations[b]	9.6	4.5	2.6	10.0	2.2	-1.5	-0.6	3.0
Gross domestic product	5.3	5.0	2.6	-2.0	3.8	3.7	4.2	3.7
				Constant 2009$				
Total R&D, all performers	3.9	3.9	0.8	-1.2	-0.5	2.7	0.0	3.2
Business	3.8	4.8	0.6	-3.6	-2.4	3.3	1.0	5.1
Federal government	2.4	1.4	0.3	3.0	4.2	3.3	-4.3	-4.3
Federal intramural[a]	2.3	0.9	0.6	1.6	3.4	7.1	-4.4	-4.3
FFRDCs	2.5	2.4	-0.2	5.5	5.7	-3.5	-4.1	-4.1
Nonfederal government	NA	NA	4.9	NA	19.4	-1.4	-6.8	-1.6
Universities and colleges	5.5	2.3	2.2	4.9	4.7	1.3	-0.4	0.7
Other nonprofit organizations[b]	7.6	1.7	1.1	9.2	1.0	-3.4	-2.3	1.5
Gross domestic product	3.4	2.2	1.2	-2.8	2.5	1.6	2.3	2.2

NA = not available.

FFRDC = federally funded R&D center.

[a] Includes expenditures of federal intramural R&D and costs associated with administering extramural R&D.

[b] Some components of the R&D performed by other nonprofit organizations are projected and may later be revised.

NOTES: Longer-term trend rates are calculated as compound annual growth rates. Data for 2013 include some estimates and may later be revised. As a further aid to interpretation, the National Science Foundation's data series on U.S. R&D performance dates back to 1953. The average annual rate of growth of total R&D for the 1953–2013 period was 7.8%, compared with 6.5% for U.S. gross domestic product over the same period. Adjusted for inflation, these average annual rates were, respectively, 4.3% and 3.1%.

SOURCE:	National Science Foundation, National Center for Science and Engineering Statistics, National Patterns of R&D Resources (annual series). *Science and Engineering Indicators 2016*